UNITED STATES DISTRICT COURT WESTERN DISTRICT OF VIRGINIA ROANOKE DIVISION

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Case No. _ 7:20MJ51

1DJI Phantom 4 Unmanned Aerial Vehicle (UAV), white in color, serial number PH4-5870MAH-15.2V,16GB Sony Micro SD digital media storage card associated with it

AFFIDAVIT IN SUPPORT OF AN APPLICATION FOR A SEARCH WARRANT

I, Bret M. Stolle, being duly sworn, hereby, depose and state as follows:

INTRODUCTION

- 1. I am a Special Agent with the U.S. Department of Transportation, Office of Inspector General, and have been since April 2016. During my employment as a Special Agent, I have been assigned to investigate violations of federal law including, but not limited to, flying aircraft illegally, operating unregistered Unmanned Aerial Systems (UAS), suspected unapproved aircraft parts, and other transportation crimes. In these investigations, I have been involved in the execution of arrest, search, and seizure warrants. I have received training in interviews, the executions of searches and arrests, communications platforms, computer networks, and various other criminal investigative procedures.
- 2. The facts set forth in this affidavit are based upon my personal knowledge, knowledge obtained during my participation in this investigation, knowledge obtained from other law enforcement personnel, review of documents related to this investigation, communications with others who have personal knowledge of the events and circumstances described herein, and

information gained through training and experience. I have not included in this affidavit every fact known to me in regard to this investigation, but rather only those facts which are sufficient to establish probable cause.

3. I make this affidavit in support of an application for a search warrant for information stored on a DJI Phantom 4 Unmanned Aerial Vehicle (UAV), white in color, bearing serial number PH4-5870MAH-15.2V, and a 16GB Sony Micro SD digital media storage card associated with it, all belonging to James Russell **WEEKS** III. The information to be searched is described in the following paragraphs and in Attachment A. I believe the facts in this affidavit show there is probable cause to believe **WEEKS** committed a violation of 49 U.S. Code \$46306(b)(5)—knowingly and willfully operating an aircraft eligible for registration when it is not registered.

RELEVANT STATUTES

4. Title 49, United States Code, Section 44101 requires that "a person may operate an aircraft only when the aircraft is registered under Section 44103 of this title," with limited exceptions for (1) foreign aircraft registered in their home countries; (2) aircraft that is part of the national defense forces; or (3) aircraft that has recently transferred ownership. 49 U.S.C. § 44101, 40103(d), 41703. An "aircraft" is defined as "any contrivance invented, used, or designed to navigate, or fly in, the air." 49 U.S.C. § 40102. Title 49, United States Code, Section 46306, which applies only to aircraft not used to provide air transportation, makes it a federal criminal offense, punishable for not more than three years, if a person owns an aircraft that is eligible for registration and then knowingly and willfully operates or allows another person to operate an unregistered aircraft. 49 U.S.C. § 46306(b)(5) and (6).

BACKGROUND

- 5. The Federal Aviation Administration (FAA) regulates Unmanned Aerial Systems (or "UAS") in the United States. A UAS is comprised of an Unmanned Aerial Vehicle (or "UAV"—a remotely controlled, unmanned aircraft), a ground control system (e.g., a pilot along with a cell phone, tablet or other device used for remote control of the UAV), and the communications systems linking them. According to 49 U.S.C. § 44809(a)(8), recreational UAV pilots are required to register their UAVs with the FAA, mark them with their FAA registration numbers, and carry proof of registration while operating. Recreational pilots must only fly UAVs recreationally; commercial operation requires that pilots obtain a valid Remote Pilot Certificate issued by FAA.
- 6. Safe operation of UAVs by recreational pilots is necessary to maintain safety of the National Airspace (NAS), which is trafficked every day by over 44,000 aircraft and over 2.7 million passengers. In the event of a collision, even a small UAV can seriously damage a manned aircraft, and could possibly cause a manned aircraft to crash, resulting in injuries or fatalities. Additionally, recreational UAVs can injure people, damage vehicles, and cause traffic accidents.
- 7. On its public UAS website, www.faa.gov/uas, FAA spells out rules for safe operation of UAVs by recreational pilots, which are codified in 14 CFR § 107.11-107.51. The site serves as a ready guide to assist recreational pilots in meeting FAA requirements and operating safely.

 According to these regulations, recreational pilots must fly at or below 400 feet above ground level (AGL) while in uncontrolled airspace, and obtain authorization before flying in controlled airspace. They must always fly their UAVs within their own visual line of sight (VLOS), or the VLOS of another person who is co-located with and in direct communication with the pilot. They

must never fly over any person or moving vehicle. According to 49 U.S.C. § 46320, recreational pilots must also never interfere with emergency response activities—including firefighting and law enforcement activities—and must never fly UAVs in a careless or reckless manner. In fact, operating a UAV in a careless or reckless manner so as to endanger the life or property of another is prohibited under 14 CFR § 107.23.

8. The DJI Phantom 4 UAV ("Phantom 4") is a quadcopter drone measuring about 14" diagonally, excluding propellers. It weighs just over 3lbs. and is capable of flying at nearly 45 miles per hour. The Phantom 4 is equipped with a 12.4 megapixel digital camera capable of taking still photographs and recording high-definition digital video. The camera records to a removable Micro SD memory card up to 64 gigabytes in capacity. The Phantom 4 is operated via a battery powered remote control and interfaces with a mobile application, DJI GO 4, allowing live viewing of the camera on smartphones or tablets. Flight data, including data pertaining to the UAV's sensors, navigation system, devices, remote control, no-fly zones, and vision system images, is automatically recorded to the Phantom 4's internal storage. The data is exportable via the Phantom 4's USB port.

FACTS ESTABLISHING PROBABLE CAUSE

9. Witness 1 (W-1), Witness 2 (W-2), Witness 3 (W-3), and Witness 4 (W-4) are firefighters employed by the Salem, VA Fire Department. On July 25, 2019, they were working an evening shift at the fire station located at 105 South Market Street, Salem, VA. The station is within the Western District of Virginia. Due to its proximity to Roanoke Regional Airport, the station is inside FAA Class C controlled airspace. Because of the volume of aircraft taking off and landing at the airport, and the likelihood of aircraft relying on instrumentation to avoid

collisions when visibility is poor, all aircraft (including UAVs) must be in two-way radio communication with Roanoke Regional Airport's air traffic control (ATC) tower and obtain authorization prior to flying within its Class C airspace. The Class C airspace extends from the surface up to 4,000 feet above ground level (AGL).

- 10. At around 6:00PM, the firefighters saw a UAV hovering and flying directly in front of the station. Two Salem Police Department (SPD) officers were present for much of the incident—one coincidentally present, discussing first aid techniques with firefighters, and another, called over from the adjacent police department after the incident began. Witnesses 1 through 4 described the UAV as white in color, about 24" in diameter, with four propellers, and a camera mounted under its body. This matches the description of the UAV listed in Paragraph 3 above.
- 11. The UAV initially hovered above the station and about 10-15 feet in front of the station's ambulance bay. Throughout the encounter, the UAV repeatedly dove down at Witnesses 1 through 4—who were assembled in front of the ambulance bay to observe the UAV—and then flew back up; it did this five to seven times. At some points it hovered as low as eye level. W-1 made multiple attempts to swat the UAV away with a trash bag, and in response, the UAV dove down multiple times to within three to five feet of his head. W-3 sprayed a fire hose at the UAV in an attempt to chase it away, but did not succeed. W-3 saw W-1 dodging away from the UAV as it dove towards him.
- 12. Throughout the incident, the UAV was flying generally in front of the ambulance bay door, in the path the ambulance would take to exit the station. Had there been an emergency, the ambulance driver would have likely had no choice but to strike the UAV with the ambulance, which could have delayed their emergency response.

- 13. After about 10 minutes, the UAV flew into the station through the open ambulance bay door. The firefighters had to hide behind trucks, dive out of the way, or run deeper into the building for their own safety. W-2 closed the bay door in an attempt to trap the UAV and in hopes that it would cease operating. At this point, the operator seemed to lose control of the UAV, which hit an exhaust tube track near the ambulance bay ceiling. The UAV bounced off of the ambulance and hit the floor with such force that its battery pack came out and it came to rest.
- 14. After it crashed on the ambulance bay floor, one of the SPD officers present seized the UAV, its battery pack, and a memory card that was installed in the body of the UAV. The officer turned these items over to the SPD evidence section. On September 17, 2019, I took custody of these items from the SPD evidence section. The UAV and memory card I received from SPD are the ones described in Paragraph 3 above. The UAV matches the description provided by witnesses.
- 15. James Russell WEEKS III went to the police station later that evening and spoke with officers in an attempt to recover the UAV. WEEKS told officers the UAV was his property and he had let a friend named "Brandon" fly it. WEEKS refused to give further identifying information for Brandon. WEEKS said he was inside his home eating dinner while Brandon flew the UAV outside. Brandon then told WEEKS that he had crashed the UAV. WEEKS told officers he looked at the UAV's flight path on his iPad to determine where it crashed. When WEEKS learned that the UAV had been seized as evidence, WEEKS admitted to officers that he, not Brandon, was flying the UAV. WEEKS said he knows the FAA regulations and has been flying UAVs for three years. WEEKS said he previously owned a \$3,000 DJI Inspire UAV that was registered with the FAA.

16. Prior to referring the matter for investigation, FAA officials searched their databases for

information pertaining to WEEKS. FAA determined WEEKS holds no FAA certificates and has

no UAVs registered in his name, as is required by 14 CFR 107.13 and 49 U.S. Code § 44101.

CONCLUSION

17. Based on the information contained herein, I respectfully submit that there is probable

cause to believe that, on July 25, 2019, in the Western District of Virginia, JAMES RUSSELL

WEEKS III owned an aircraft eligible for registration and knowingly and willfully operated or

allowed another person to operate the aircraft when it was not registered, in violation of 49 U.S.

Code §46306(b)(5), and that evidence of this violation is stored on the UAV and memory card

described in Paragraph 3 above.

/s/Bret M.Stolle

Bret M. Stolle

Special Agent

U.S. Department of Transportation,

Office of Inspector General

Reviewed by: Christopher Kavanaugh, Assistant United States Attorney

Sworn and subscribed before me on this <u>19th</u> day of May, 2020.

Sworn and attested to telephonically.

Robert S. Ballon

The Honorable Robert S. Ballou

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